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11	189.5	26.9	102	21	AAB24464	Plant_SOP_wood4
12	189.5	26.9	102	21	AAB244705	Plant_SOP_wood4
13	189.5	26.9	102	21	AAB24463	Plant_SOP_wood4
14	189.5	26.9	102	21	AAB244704	Plant_SOP_wood4
15	189.5	33.0	102	22	AAB244154	Plant_SOP_wood
16	189.5	33.0	102	22	AAB244207	Plant_SOP_wood
17	189.5	33.0	102	15	AAB244032	Seed4_Plastic4
18	189.5	33.0	102	21	AAB244587	Seed4_ImpeProduct
19	189.5	33.0	102	21	AAB244773	Plant_SOPs_Plastic
20	189.5	33.0	102	21	AAB244666	Plant_SOPs_Plastic
21	189.5	33.0	102	21	AAB2447719	Plant_SOPs_Plastic
22	189.5	33.0	102	21	AAB244585	Plant_SOPs_Plastic
23	189.5	33.0	102	21	AAB2447737	Plant_SOPs_Plastic
24	189.5	33.0	102	21	AAB244604	Plant_SOPs_Plastic
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29	189.5	33.0	102	21	AAB244666	Plant_SOPs_Plastic
30	189.5	33.0	102	21	AAB2447719	Plant_SOPs_Plastic
31	189.5	33.0	102	21	AAB244585	Plant_SOPs_Plastic
32	189.5	33.0	102	23	AAB244884	AminoAcid_SOPs
33	189.5	33.0	102	23	AAB244204	Plant_SOPs_Plastic
34	189.5	33.0	102	21	AAB244647	Plant_SOPs_Plastic
35	189.5	33.0	102	21	AAB244877	Plant_SOPs_Plastic
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51	189.5	33.0	102	21	AAB244666	Plant_SOPs_Plastic
52	189.5	33.0	102	21	AAB2447719	Plant_SOPs_Plastic
53	189.5	33.0	102	21	AAB244585	Plant_SOPs_Plastic
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55	189.5	33.0	102	23	AAB244204	Plant_SOPs_Plastic
56	189.5	33.0	102	21	AAB244647	Plant_SOPs_Plastic
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59	189.5	33.0	102	21	AAB244601	Plant_SOPs_Plastic
60	189.5	33.0	102	21	AAB244667	Plant_SOPs_Plastic
61	189.5	33.0	102	21	AAB244707	Plant_SOPs_Plastic
62	189.5	33.0	102	21	AAB244901	Plant_SOPs_Plastic
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70	18					

1981, 31.

XX
XX
XX
XX

WILLIAM J. WILSON, JR.
MAY 1968, MAY 1969.

[illegible]

1

[illegible]

[illegible]


```

23 VSVLAAAGVAVIAAMKVFNGULPAPATATNTNNELTFEAKH1633 FUSJSDNRYVETPTFCF 97
70 ENPQTEPYSPDAARFLASRWSIFPT 97
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28 ENPTEFVTVGDKAFYDNEPIPSF 110
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RESULT 10
ID AAWZ2506
XX AAWZ2506 standard J, Protein, 94 AA
XX AAWZ2506;
XX
XX 30-JAN-1996 (first entry)
XX
XX Sugar beet antimicrobial protein IWP7.
XX Antimicrobial protein; sugar beet, maize, antifungal activity;
XX growth promotion; herbicide resistance; transgenic plant; IWP;
XX intercellular washing fluid.
XX Beta vulgaris
XX WC9723617-A1.
XX
XX 03-JUL-1997.
XX
XX 20 FEB 1999; 46W-BIOP0765.
XX
XX 21 DEC 1999. 94 DB 200765
XX (SANDC ; SANDC IPT
XX (SANDC ; SANDC PATENT GMBH.
XX (SANDC ; SANDC EPRIIMPEEN YEPW OMFH
XX
XX Branstetter J, Proll Kristensen A, Nielsen K:
XX WPL; 1997 151054/12
XX N-FS09, AAI-2980.
XX
XX New antimicrobial proteins from sugar beet: useful in plant
XX protection, especially against fungi:
XX Claim 2; Page 19, 40pp; English.
XX
XX This is an antimicrobial protein from the sugar beet plant. The encoding
XX cDNA sequence information was derived from active peptides which were
XX isolated from intercellular washing fluid (IWF) from sugar beet plants.
XX The peptide sequences were used to design primers for the amplification
XX of the encoding cDNA. The cDNA can be inserted into usual vectors and
XX used for plant transformation. They may also be used to transform
XX microorganisms for production of recombinant protein. These antimicrobial
XX proteins can be combined with atleast one other protein having herbicide
XX resistance, plant growth promoting, antifungal, antibacterial and
XX antiviral activities. The antimicrobial proteins are used to control
XX bacteria, viruses and fungi.
XX
XX Sequence 94 AA:
XX
XX Query March 45-68; Score 2347; DB 18; Length 94;
XX Best local similarity 14.3%, E=1 E-1, aa 18.
XX Matches 19, Mismatches 24, Mismatched 23, Indels 2; Gaps 1;

24 7 TCFLLVAVIAAMKVFNGULPAPATATNTNNELTFEAKH1633 FUSJSDNRYVETPTFCF 97
||||| |||| |
26 7 TLLLVAVVAVILF--ETEFIEAVTIGAVQSFCAPRAMEITHTTSCAYAVLPRTKQLC 64
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27 CT ETLKESDFQFYTPMAAFLASTQNSI 94
||||| |||| |

28 STTKFTLEFDYINGCAPPVASTGVSV 92
||||| |||| |

RESULT 11

```


XX DR WPI: 1991-295635/40.
XX DR R-F3D6; AAQ13866; AAQ13861, AAQ13862.
XX FI DNA constructs for probes of plant transformation
XX PT gene sequence expressed early in seed development
XX PS Example 1; Fig 1; 56pp; English.
XX CC The Bce4 gene is expressed at relatively high levels during early
XX CC embryonic development. The function of the protein expressed by Bce4
XX CC is unknown but expression of the gene coincides with the
XX CC accumulation of lipids in the plant seed. The Bce4 gene is of
XX CC interest as a source of plant expression regulatory sequences for
XX CC genetic engineering. See also AAQ13861 and AAQ13862.
XX SU Sequence 102 AA;
Query Match 33.0%; Score 169.5; DB 12; Length 102;
Best Local Similarity 33.0%; Freq. No. 36.11; Gaps 3;
Matches 15; Conservative 19; Mismatches 36; Indels 17; Gaps 2;
QY 1 MKAPTMCFLVAVIAAMVFMGSLF-AAATV-...TUNMELVCAKASGSLIS 51
DB 1 MKITLMTITLIIA...LGSVPLEATVESGEVAGSVVTKLAPV PAMTTARDEPT 56
QY 52 ASGSEKVPFPPCPGNYRNHS:KQVSPFAAAKIASGVSIPCC 97
DE 57 TELLGRLVELVGPCLGVYENPAYSIMVTSIRFPVLTFFVPPFFS 100
Search completed: January 12, 1993, 07:00:35
Job Time: 1:08 secs

XX DR 09-JAN-1999, 4000 0115003
XX DR 09-JAN-1999, 4000 0115003
XX FA (CERE-) CERES INC.
XX FA Alexander N, Brever V, Chen X, Subramanian G, Troukhan ME;
XX PT Zhang L;
XX WPI: 2000 468070/40
XX CC New corn plant and Arabidopsis thaliana sequence-determined DNA
XX CC fragments useful for expressing gene products and for controlling
XX CC expression of a target gene
XX PS Claim 14, Page 400, 673pp; English.
XX CC The present invention describes a sequence of DNA which is complete cDNA
XX CC sequences and/or sequences of genomic DNA encompassing complete genes,
XX CC portions of genes, and/or individual regions, collectively referred to
XX CC as sequence determined DNA fragments (SDFs), from corn plants and
XX CC Arabidopsis thaliana. The SDFs are promoters, structural genes,
XX CC untranslated regions (UTRs), or 3' termination sequences. They can be
XX CC used for expressing a gene product, a structural gene, an UTR or as a
XX CC target gene, either as a promoter, a structural gene, an UTR or as a
XX CC 3' termination sequence. They are also useful as tools for genetic
XX CC mapping and identification of a particular individual plant or for
XX CC clustering a group of plants with a common trait. AAA/8443 to AAA/8630
XX CC and AAA/8445 to AAA/8495 represent the specifically claimed
XX CC polynucleotide sequences and polypeptides encoded by them given in the
XX CC present invention
XX SU Sequence 110 AA;
Query Match 36.1%; Score 122.5; DB 21; Length 110;
Best Local Similarity 33.3%; Freq. No 1.9e-13;
Matches 36; Conservative 19; Mismatches 36; Indels 17; Gaps 2;
QY 1 MKAPTMCFLVAVIAAMVFMGSLPAA-----TAVTCNMYMELVPCAGAISSQP 49
DE 9 MKVITL---VLTGVILSTSPPLAIAEAGCTNNVVT-LAPLQVTLAMITGPR 62
QY 50 TGGSCGKPVETFTGNYRNHS:KQVSPFAAAKIASGVSIPCC 97
DE 63 PGAGGAGALIEELGSAFATAFALVITSPNAPVLAAGNAYPC 110
RESULT 15
AAK14155
XX AC AAK14155 standard, Protein, 102 AA.
XX AC AAK14155;
XX DT 10-DEC-1991 (first entry)
XX DE B.campestris seed-specific Bce4 protein.
XX KW transgenic plant; seed specific promoter; rapin; lipid storage.
XX AC Brassica campestris.
XX WPI: 1990-A.
XX PC 19 SEP 1991.
XX DE 14-MAR-1991; 91WO-US01750.
XX PR 16-MAR-1990; 90US-0494722.
XX PA (CALG-) CALGENE INC.
XX PI Knaf VC, Kridl JC, Scherer DE;

GenCore version 5.1.1
Copyright 1997-2002 GenCorp Inc.

SW Protein - protein search, using SW model

Run on: January 10, 2003, 07:01:14 Search time 25 seconds

(without alignments)
114.16 Million cell updates/sec

Target: US-09-923-844B-4

Perfect Score: 513

Sequence: 1 MAFVYVILVYVYVAVWVF

Scoring table: BLOSUM62

Gap: 10.0, Gapext 0.5

Searched: 26374 seqs, 2942222 residues

Total number of hits satisfying chosen parameters: 26374

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0.1
Maximum Match 100%
Listing first 45 summaries

Database: 1: Issued Patents, All
2: US-09-923-844B-4, ME, PPT
3: US-09-923-844B-4, ME, PPT
4: US-09-923-844B-4, ME, PPT
5: US-09-923-844B-4, ME, PPT
6: US-09-923-844B-4, ME, PPT
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SUMMARIES

Result No	Score	Query Match	Length	DB	Description
1	214	45.6	94	US-09-091-590A-5	Sequence 5, Appl
2	94.6	18.4	117	US-09-091-590A-5	Sequence 4, Appl
3	94.6	18.4	117	US-09-091-590A-5	Sequence 4, Appl
4	93	18.1	118	US-09-091-590A-5	Sequence 4, Appl
5	93	18.1	118	US-09-091-590A-5	Sequence 4, Appl
6	92	17.2	92	US-09-091-590A-5	Sequence 4, Appl
7	88	17.2	92	US-09-091-590A-5	Sequence 4, Appl
8	87	17.2	92	US-09-091-590A-5	Sequence 4, Appl
9	87	17.2	92	US-09-091-590A-5	Sequence 4, Appl
10	87	17.2	92	US-09-091-590A-5	Sequence 4, Appl
11	87	17.2	92	US-09-091-590A-5	Sequence 4, Appl
12	87	17.2	92	US-09-091-590A-5	Sequence 4, Appl
13	86	16.8	91	US-09-091-590A-5	Sequence 4, Appl
14	86	16.8	91	US-09-091-590A-5	Sequence 4, Appl
15	83.5	16.3	93	US-09-091-590A-5	Sequence 4, Appl
16	81	16.2	90	US-09-091-590A-5	Sequence 4, Appl
17	81	16.2	90	US-09-091-590A-5	Sequence 4, Appl
18	77.5	15.1	120	US-09-091-590A-5	Sequence 4, Appl
19	75	14.8	92	US-09-091-590A-5	Sequence 4, Appl
20	75	14.8	92	US-09-091-590A-5	Sequence 4, Appl
21	73	14.3	92	US-09-091-590A-5	Sequence 4, Appl
22	72	14.0	92	US-09-091-590A-5	Sequence 4, Appl
23	71	13.8	90	US-09-091-590A-5	Sequence 4, Appl
24	71	13.8	90	US-09-091-590A-5	Sequence 4, Appl
25	69	13.6	90	US-09-091-590A-5	Sequence 4, Appl
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27	69	13.6	90	US-09-091-590A-5	Sequence 4, Appl

28	68	13.3	120	US-08-539-304A-2	Sequence 1, Aff
29	67.5	13.2	91	US-08-591-498-3	Sequence 1, Aff
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32	66	12.9	93	US-08-591-498-3	Sequence 1, Aff
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ALIGNMENTS

RESULT 1
US-09-091-590A-5
Sequence 5, Appl

Patent No. 6242574
GENERAL INFORMATION:

APPLICANT: Nielsen, Klaus

APPLICANT: Røhl, Kristensen, Anne

TITLE OF INVENTION: Anti-Microbial Peptides

FILE REFERENCE: US-09-091-590A-5

US-09-091-590A-5

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US-09-091-590A-5

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US-09-091-590A-5

US-09-091-590A-5

US-09-091-590A-5

US-09-091-590A-5

US-09-091-590A-5

Mon Jan 13 09:24:57 2003

ADDRESSER: Department of Biotechnical Sciences, Agricultural
ADDRESSER: University of Missouri Agricultural Experiment Station
ADDRESSER: 1111 N. 11th St.
ADDRESSER: Columbia, MO 65211-0001
COUNTRY: MO 65211-0001
ZIP: 65211-0001
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" 1.44 Mb diskette
COMPUTER: IBM PC
OPERATING SYSTEM: WINDOWS 98
SOFTWARE: Word Processing
CURRENT APPLICATION DATA:
APPLICATION NUMBER: 09-923-844b-4
FILING DATE: 09-09-91
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 09-923-844b-4
FILING DATE: 09-09-91
ATTORNEY/AGENT INFORMATION:
NAME: Theodora J. Carvis
REGISTRATION NUMBER: 26110
REFERENCE/COPIES INFORMATION:
TELEPHONE: 203 324 6155
TELEFAX: 203 327 1096
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 117 residues
TYPE: amino acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE:
ORGANISM: Barley
PUBLICATION INFORMATION:
AUTHORS:
AUTHORS: Linnestad, Casper
AUTHORS: Lonnepborg, Anders
AUTHORS: Kalla, Roger
AUTHORS: Olsen, Odd-Arne
TITLE: Promoter of a Lipid Transfer Protein Gene
TITLE: Expressed in Barley Aleurone Cells Contains
TITLE: Similar myc and yf Promoter Sites as the Maize
TITLE: Bar-McC Allele
JOURNAL: Plant Physiol.
VOLUME: 97
PAGES: 842
DATE: 17.06.91
US-08-702-609A-4

Query Match 18.4% Score 94.5 DB 3 Length 117
Best Local Similarity 27.6% Ref. No. 00049
Matches 29 Conservative 14 Mismatches 33 Indels 25 Gaps 6
CY 10 LVAVIANNVVFVMSGLP-AADAVTQVWME-LVPCAGATSSAPDSQSSQVPSFVF----- 60
DB 6 VLMAALALVLMALALALALALALALALALALALALALALALALALALALALALALALALALALAL 65
CY 11 TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT 90
DB 60 CCGGCGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 104

RESULT 3
US-08-702-609A-4
Sequence 6, Application US/08070904
Patent No. 5477002
GENERAL INFORMATION:
APPLICANT: Tuttle, AnnMarie
APPLICANT: Crossland, Lyle D.
TITLE OF INVENTION: Market-Specific DNA Sequences, Genomic
TITLE OF INVENTION: DNA Sequences and Recombinant RNA Sequences
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:

CORRESPONDENCE ADDRESS:
ADDRESSER: Plant Molecular Biology Laboratory,
ADDRESSER: Department of Biotechnical Sciences, Agricultural
ADDRESSER: University of Missouri Agricultural Experiment Station
ADDRESSER: 1111 N. 11th St.
ADDRESSER: Columbia, MO 65211-0001
COUNTRY: MO 65211-0001
ZIP: 65211-0001
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" 1.44 Mb diskette
COMPUTER: IBM PC
OPERATING SYSTEM: WINDOWS 98
SOFTWARE: Word Processing
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08070904
FILING DATE: 09-NOV-1996
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: 09-923-844b-4
FILING DATE: 09-02-95
ATTORNEY/AGENT INFORMATION:
NAME: Theodora J. Carvis
REGISTRATION NUMBER: 26110
REFERENCE/COPIES INFORMATION:
TELEPHONE: 203 324 6155
TELEFAX: 203 327 1096
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 117 residues
TYPE: amino acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE:
ORGANISM: Barley
PUBLICATION INFORMATION:
AUTHORS:
AUTHORS: Skriver, Karen
AUTHORS: Leah, Robert
AUTHORS: Mallet, Eric, Frieder
AUTHORS: Olsen, Finn-Iok
AUTHORS: Mundy, John
TITLE: Structure and Expression of the Barley Lipid Transfer Protein Protein of
JOURNAL: Plant Molecular Biology
VOLUME: 18
PAGES: 587
DATE: 16.09.91
US-08-702-609A-6

Query Match 18.4% Score 94.5 DB 3 Length 117
Best Local Similarity 27.6% Ref. No. 00049
Matches 29 Conservative 14 Mismatches 33 Indels 25 Gaps 6
CY 10 LVAVIANNVVFVMSGLP-AADAVTQVWME-LVPCAGATSSAPDSQSSQVPSFVF----- 60
DB 6 VLMAALALVLMALALALALALALALALALALALALALALALALALALALALALALALALALALAL 65
CY 11 TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT 95
DB 60 CCGGCGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 104

RESULT 4
US-08-702-904-4
Sequence 4, Application US/08070904
Patent No. 5477002
GENERAL INFORMATION:
APPLICANT: Tuttle, AnnMarie
APPLICANT: Crossland, Lyle D.
TITLE OF INVENTION: Market-Specific DNA Sequences, Genomic
TITLE OF INVENTION: DNA Sequences and Recombinant RNA Sequences
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:


```

1  APPLICATION NUMBER: 1991-0038-0002
2  FILING DATE:
3  ATTORNEY/AGENT INFORMATION:
4  NAME: LARRY, STEVEN P.
5  REGISTRATION NUMBER: 32,618
6  REFERENCE/PATENT NUMBER: 520 1024
7  TELECOMMUNICATION INFORMATION:
8  TELEPHONE: (919) 541-8615
9  TELEFAX: (919) 541-8689
10  INVENTION FOR: NO: 19:
11  SEQUENCE CHARACTERISTICS:
12  LENGTH: 118 amino acids
13  TYPE: amino acid
14  TOPOLOGY: linear
15  MOLECULE TYPE: protein
16  US-08-207-904-19
17
18  Query Match: 18.1% Score 911 DB 11 Length 118
19  Invention: 18.1% Score 911 DB 11 Length 118
20  Matches: 27, Conservative: 10, Mismatches: 41, Indels: 14, Gaps: 4
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MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: CW18
1238591-498-11

Query Match	17.0%	Score 42, DB 1	Length 30;
Best Local Similarity	34.0%	Seq. No. 000004;	
Match %	9	A: Mismatches 27;	Indels 18;
			Gaps 4;

[illegible]

75 RQVSPAAAGKIASGGVSP 95
77 AGAVNAGFAAGIPSPGVSP 77

RESULT 7
US 08-326-352-3
Sequence 3, Application US/2002/00392
Patent No 5446127

INVENTOR: FRANCISCO CAPRIS-OLMEDO et al
 ATTORNEY: NAVE, ANTONIO J. PETERLIN AND
 TITLE OF INVENTION: COMPOSITIONS CONTAINING SAME
 NAME: ANTONIO J. PETERLIN AND
 TITLE OF INVENTION: COMPOSITIONS CONTAINING SAME
 NAME: ANTONIO J. PETERLIN AND

COPIES: 100
ADDRESS: WASHINGTON, D.C.
STREET: 805 FIFTEENTH STREET, N.W., #700
CITY: WASHINGTON
STATE: D.C.

```

ZIP: 20005
COMPANY: REAGRE, EPCO.
MEDIUM: 1600
COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: wordperfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER:

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CLASSIFICATION: 800
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER 07/066 1984
 FILING DATE January 25, 1988
 AUTHORITY AGENT INFORMATION
 NAME: Walter M. Cheek, Jr.
 REGISTRATION NUMBER: 33,367
 REFERENCE/DOCKET NUMBER:
 TELECOMMUNICATION INFORMATION
 TELEPHONE: 202-371-8850
 TELEFAX:
 TELEX:

INFORMATION FOR REPORT NO. 3
SEQUENCE CHARACTERISTICS
LENGTH: 30 amino acids
TYPE: amino acid
STRANDNESS
TOPOLOGY: single
MOLECULE TYPE: linear
HOMOLOGY
ANTI-SENSE
FRAGMENT
ORIGINAL SOURCE
ORGANISM
STRAIN
INDIVIDUAL ISOLATE:
DEVELOPMENTAL STAGE:
HAPLOTYPE
TISSUE TYPE
CELL TYPE:
CELL LINE:

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1 ORGANELLE:
2 IMMEDIATE SOURCE:
3 LIBRARY:
4 CLONE:
5 POSITION IN GENOME:
6 CHROMOSOME/SEGMENT:
7 MAP POSITION:
8 UNITS:
9 FEATURE:
10 NAME/KEY:
11 LOCATION:
12 IDENTIFICATION METHOD:
13 OTHER INFORMATION:
14 PUBLICATION INFORMATION:
15 AUTHORS:
16 TITLE:
17 JOURNAL:
18 VOLUME:
19 ISSUE:
20 PAGES:
21 DATE:
22 DOCUMENT NUMBER:
23 FILING DATE:
24 PUBLICATION DATE:
25 RELEVANT RESIDUES IN S

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Query Match 17.28, Score 39, -E 3, Length 90,
Best Local Similarity 33.61, Pos. 1, 0.025,
Matches 17, Conservative 8, MaxMatch 100, 99, 100, 100

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15  K2FVSVFAAFIAKCGVSIP 95
57  AGAYNAGRAAGIPSKGVSV 77

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RESULT 8
US-08-404-607-3
; Sequence 3, Application US/08404607
; Patent No. 6147281
; Patent No. 6147281

GENERAL INFORMATION: FRANCESCO MARIA LIMEGO et al.
ALPACAM. TITLE OF INVENTION: NOVEL ANTITUMORIC PEPTIDES AND
TITLE OF INVENTION: COMBINATIONS OBTAINING SAME
NUMBER OF SEQUENCES: 6
CORRESPONDENT ADDRESS:
ADDRESSEE: Wenderoth, Lind & Porach
STREET: 805 Fifteenth Street, N.W., #10
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.

1 CONTIN: 10005
 2 ALF
 3 COMPUTER RELEASABLE FORM:
 4 MEDIUM TYPE: Dacotette, 5.25 inch, 500 kb
 5 COMPTIFF: RAM Compatible
 6 OPERATING SYSTEM: MS-DOS
 7 SOFTWARE: Wordperfect 5.1
 8 CURRENT APPLICATION DATA:
 9 APPLICATION NUMBER: 087087404.607
 10 FILING DATE: March 15, 1995
 11 CLASSIFICATION: 800
 12 PRICE APPLICATION DATA:
 13 APPLICATION NUMBER: 087320.352
 14 FILING DATE: October 20, 1994
 15 PRIOR APPLICATION DATA: 077965.284
 16 APPLICATION NUMBER: 077965.284
 17 FILING DATE: January 25, 1993
 18 ATTORNEY/AGENT INFORMATION:
 19 NAME: Warren M. Cheek, Jr.

ORGANISM. *Beta vulgaris*
US-08-632-511A-2

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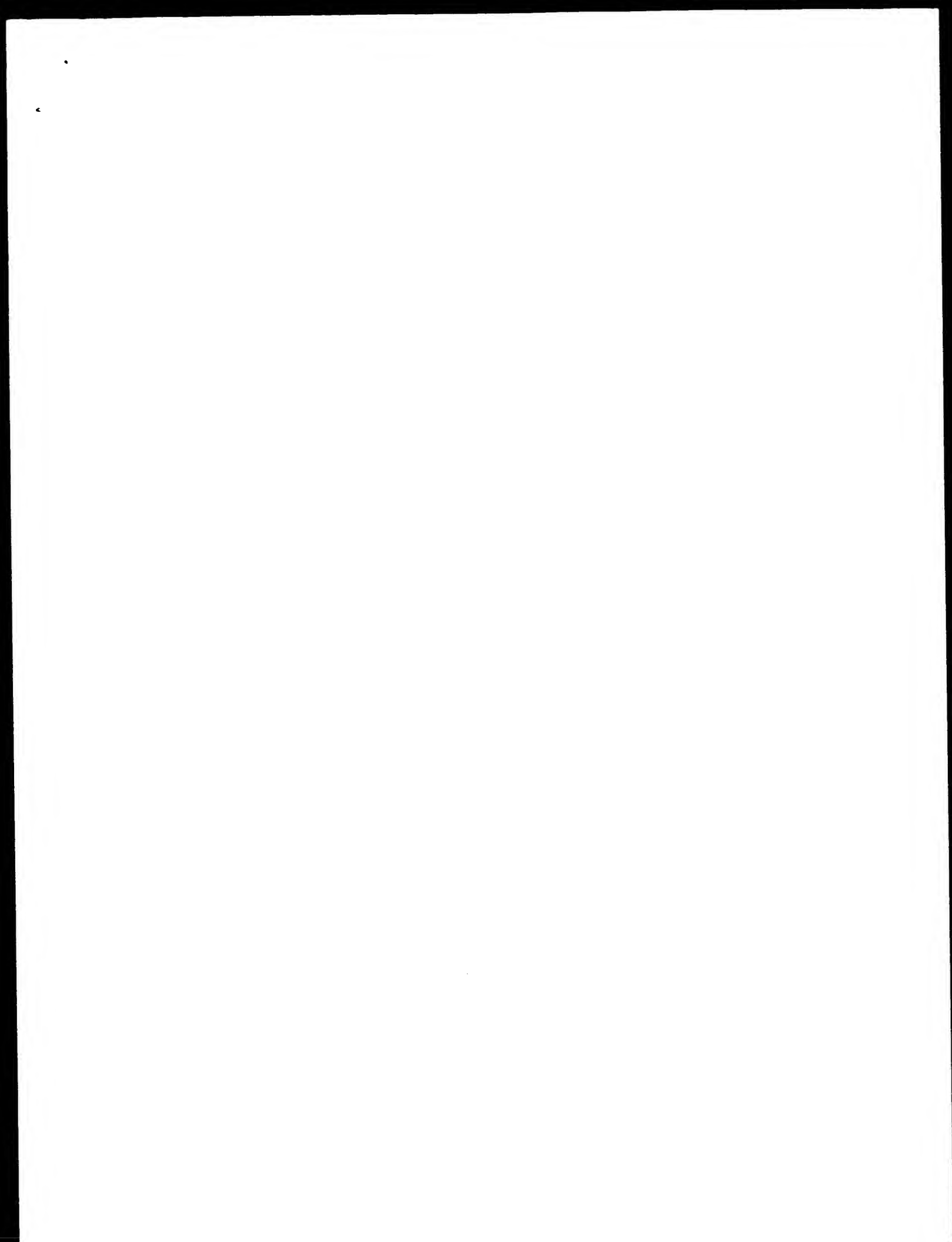
; DENOMIN: 24
; TYPE: PRT
; ORGANISM: Beta vulgaris

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[illegible]

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01  APPLICATION NUMBER: US-08/691,498
02  FILING DATE: 28-JAN-1996
03  CLASSIFICATION: 800
04  PRIOR APPLICATION DATA:
05  APPLICATION NUMBER: PCT/GB94/01636
06  FILING DATE: 29-JUN-1994
07  PRIOR APPLICATION DATA:
08  AFFILIATION NUMBER: US-017816-8
09  FILING DATE: 27-AUG-1993
10  PRIOR APPLICATION DATA:
11  AFFILIATION NUMBER: 32-341022-5
12  FILING DATE: 04-AUG-1993
13  INFORMATION FOR SEQ ID NO: 14:
14  SEQUENCE CHARACTERISTICS:
15  LENGTH: 93 amino acids
16  TYPE: amino acid
17  STRANDEDNESS: single
18  TOPOLOGY: linear
19  MOLECULE TYPE: protein
20  ORIGINAL SOURCE:
21  ORGANISM: Cm-nsLTP
22  US-08-691,498-14
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ADDENDUM:
GENERAL INFORMATION:
ADDITIONAL COMMENTS, Carl

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 Matches 27; Conservative 12; Mismatches 11; Indels 28; Gaps 6;

RESULT 14
 US-10-115-701A-7
 Sequence 7: Application US/10115701A
 Patent No. US2002015704A1
 GENERAL INFORMATION
 APPLICANT: Murgita, Robert A.
 TITLE OF INVENTION: Recombinant Alpha-Fetoprotein for
 Treating and Diagnosing Cancers
 FILE REFERENCE: 06727/004003
 CURRENT APPLICATION NUMBER: US/10/115,701A
 PRIOR FILING DATE: 2002-04-04
 PRIOR APPLICATION NUMBER: 08/758,757
 PRIOR FILING DATE: 1998-04-09
 PRIOR APPLICATION NUMBER: 08/758,757
 PRIOR FILING DATE: 1996-12-03
 PRIOR APPLICATION NUMBER: 08/377,311
 PRIOR FILING DATE: 1995-01-24
 NUMBER OF SEQ ID NOS: 16
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 7
 TYPE: PRT
 LENGTH: 393
 ORGANISM: Homo sapiens
 US-10-115-701A-7

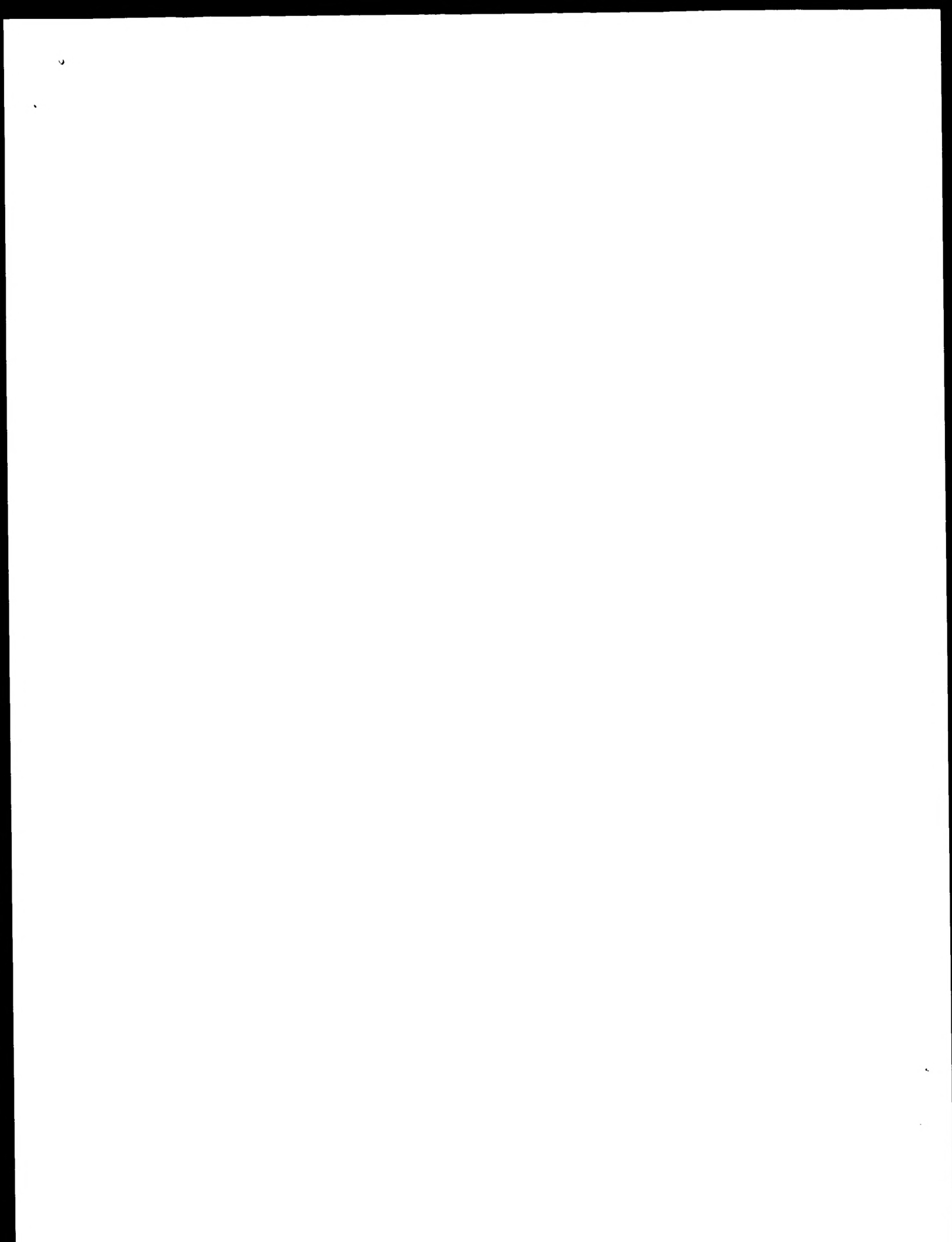
Query Match 100% Score 66, CP 9, Length 393;
 Best Local Similarity 27.6%, Pctd. No. 10;
 Matches 27; Conservative 12; Mismatches 11; Indels 28; Gaps 6;

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 Matches 27; Conservative 12; Mismatches 11; Indels 28; Gaps 6;

RESULT 15
 US-09-940-308-7
 Sequence 7: Application US/09940308
 Publication No. US20020193297A1
 GENERAL INFORMATION
 APPLICANT: Murgita, Robert A.
 TITLE OF INVENTION: Recombinant Human Alpha-Fetoprotein as
 an Immunosuppressive Agent
 FILE REFERENCE: 06727/005003
 CURRENT APPLICATION NUMBER: US/09/340,308
 PRIOR FILING DATE: 2001-08-27
 PRIOR APPLICATION NUMBER: US 09/196,723
 PRIOR FILING DATE: 1998-11-05
 PRIOR APPLICATION NUMBER: US 09/377,309
 PRIOR FILING DATE: 1995-01-24
 NUMBER OF SEQ ID NOS: 16
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 7
 TYPE: PRT
 LENGTH: 393
 ORGANISM: Homo sapiens
 US-09-940-308-7

Query Match 100% Score 66, DB 9, Length 393;
 Best Local Similarity 27.6%, Pctd. No. 10;
 Matches 27; Conservative 12; Mismatches 11; Indels 28; Gaps 6;

Search completed January 12, 2003, 07:33:28
 Job time: 22 secs



NO
REGD.
FED.
STRICTLY
CONFIDENTIAL

A:Referencio: 70741 604116
A:Accession: S04126
A:Molecule_type: rRNA

姓名	性别	年龄	籍贯	民族	文化程度	职业	婚姻	子女	备注
王德胜	男	45	山东	汉族	高中	工人	已婚	2	
李国强	男	38	河南	汉族	初中	农民	已婚	1	
张为民	男	52	江苏	汉族	大学	教师	已婚	3	
赵子龙	男	28	四川	汉族	高中	学生	未婚	0	
刘小红	女	35	湖南	汉族	初中	工人	已婚	2	
陈大伟	男	42	广东	汉族	高中	商人	已婚	1	
周小芳	女	30	浙江	汉族	大学	医生	已婚	0	
吴建国	男	55	湖北	汉族	小学	农民	已婚	4	
孙丽娟	女	25	安徽	汉族	高中	学生	未婚	0	
郑永年	男	48	江西	汉族	初中	工人	已婚	2	
马秀英	女	33	山西	汉族	高中	教师	已婚	1	
徐长贵	男	50	陕西	汉族	小学	农民	已婚	3	
郭小华	女	27	福建	汉族	大学	学生	未婚	0	
黄大伟	男	40	广西	汉族	高中	工人	已婚	2	
周小芳	女	32	云南	汉族	初中	农民	已婚	1	
吴建国	男	53	贵州	汉族	小学	工人	已婚	4	
孙丽娟	女	26	海南	汉族	高中	学生	未婚	0	
郑永年	男	47	宁夏	汉族	初中	工人	已婚	2	
马秀英	女	31	青海	汉族	高中	教师	已婚	1	
徐长贵	男	51	甘肃	汉族	小学	农民	已婚	3	
郭小华	女	29	内蒙古	汉族	大学	学生	未婚	0	
黄大伟	男	41	新疆	汉族	高中	工人	已婚	2	
周小芳	女	34	西藏	汉族	初中	农民	已婚	1	
吴建国	男	54	四川	汉族	小学	工人	已婚	4	
孙丽娟	女	28	重庆	汉族	高中	学生	未婚	0	
郑永年	男	49	湖南	汉族	初中	工人	已婚	2	
马秀英	女	36	湖北	汉族	高中	教师	已婚	1	
徐长贵	男	56	河南	汉族	小学	农民	已婚	3	
郭小华	女	30	山东	汉族	大学	学生	未婚	0	
黄大伟	男	43	广东	汉族	高中	工人	已婚	2	
周小芳	女	37	浙江	汉族	初中	农民	已婚	1	
吴建国	男	57	江苏	汉族	小学	工人	已婚	4	
孙丽娟	女	31	安徽	汉族	高中	学生	未婚	0	
郑永年	男	50	江西	汉族	初中	工人	已婚	2	
马秀英	女	38	山西	汉族	高中	教师	已婚	1	
徐长贵	男	58	陕西	汉族	小学	农民	已婚	3	
郭小华	女	32	福建	汉族	大学	学生	未婚	0	
黄大伟	男	44	广西	汉族	高中	工人	已婚	2	
周小芳	女	39	云南	汉族	初中	农民	已婚	1	
吴建国	男	59	贵州	汉族	小学	工人	已婚	4	
孙丽娟	女	33	海南	汉族	高中	学生	未婚	0	
郑永年	男	51	宁夏	汉族	初中	工人	已婚	2	
马秀英	女	40	青海	汉族	高中	教师	已婚	1	
徐长贵	男	60	甘肃	汉族	小学	农民	已婚	3	
郭小华	女	34	内蒙古	汉族	大学	学生	未婚	0	
黄大伟	男	45	新疆	汉族	高中	工人	已婚	2	
周小芳	女	41	西藏	汉族	初中	农民	已婚	1	
吴建国	男	61	四川	汉族	小学	工人	已婚	4	
孙丽娟	女	35	重庆	汉族	高中	学生	未婚	0	
郑永年	男	52	湖南	汉族	初中	工人	已婚	2	
马秀英	女	42	湖北	汉族	高中	教师	已婚	1	
徐长贵	男	62	河南						

C:Superfamily: phospholipid transfer protein

Query Match 20.9%; Score 107; DB 2; Length 116;

Best Local Similarity 31.6%, Pred. No. 0.00016, Mismatches 37; Indels 14; Gaps 4;

Matches 31; Conservative 16; Mismatches 37; Indels 14; Gaps 4;

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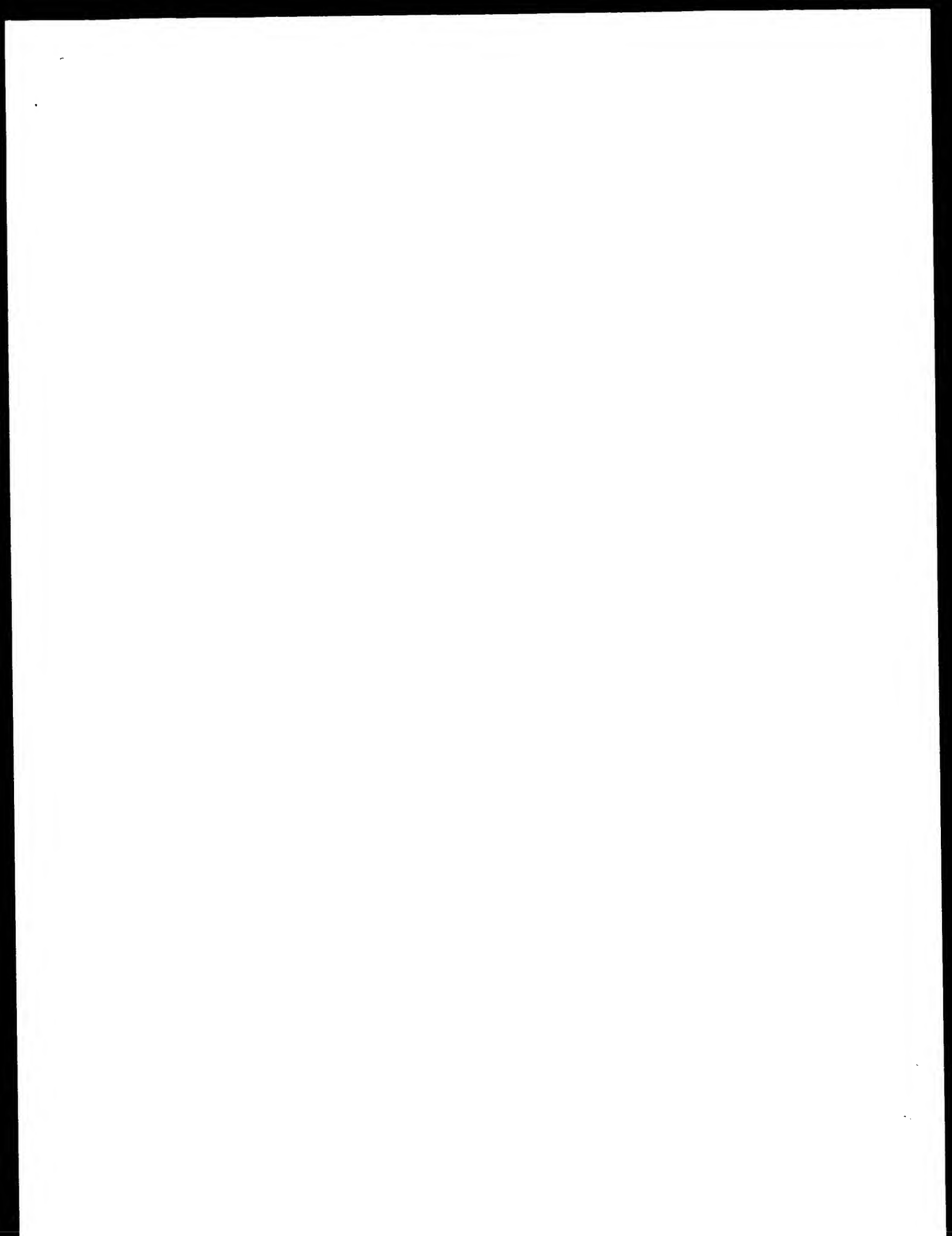
DI A IVALVAALH--LAAPHAAVVITQTQNSAVCPGLITVAPR3ASPSAAACCSVPSELFAAST 65

CY 61 CFFFTTIRNFSDF-KVSTAAAKIAS--GVSLP 45

DB 66 TADPFTACTNCTPVAFGIGLNAGNTASIPSSKGVSLP 103

Search completed: January 13, 2003, 09:06:06

Cdb time : 43 secs




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16-OCT-2001 (rel. 40, Last annotation update)
Probable nonspecific lipid transfer protein AKOS9 precursor (LTP).
Vigna unguiculata (cowpea)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
eucrosidia 1; Fabales; Papilionaceae; Papilionoideae; Phaseoleae; Vigna
VUL_TAXID:3017.
161
SEQUENCE FROM N.A.
SRATIN:AF082420.1 TIGRIS Fcst hairs;
MEDLINE:MAGNETER.PRMWED-MAGNETER
Krause A., Sgrist C.G.A., Denlinger I., Sommer H., Broughton W.J.,
"Accumulation of trypsin inhibitor containing a lipid transfer-like protein
during deformation of nodulation site in Vigna unguiculata root
hairs";
Mol. Plant Microbe Interact. 7:411-419(1994)
-- FUNCTION: POTENTIAL LIPID TRANSFER PROTEIN
-- TISSUE SPECIFICITY: ROOT TISSUES OF LEFT NODULES
CELLULAR FRAC: EXPR EXPRESSION COLOCALIZES WITH ROOT HAIR
DEFORMATION.
-- SIMILARITY BELONGS TO THE PLANT LTP FAMILY
This SWISS PROT entry is provided by a collaboration
between the Swiss Institute of Bioinformatics and the EMBL Outstation
at the European Bioinformatics Institute. There are no restrictions on its
use by third-party institutions as long as the content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (see http://www.isdb-sib.ch/about/
or send an email to license@sib-ch).
EMBL, X79004; CA556113.1 --
Interferon IFN000012; AVI
Interferon IFN000029; Plant_LTP
Interferon IFN000065; Trypanosoma
Plant PR000034; Trypanosoma
SMART: SM00443; AVI
Proteinase; Peptide; Plant_LTP; FALSE_POS
Lipid-binding; Transport; Signal.
SIGNAL 1 33 BY SIMILARITY.
CHAIN 34 99 PROBABLE NONSPECIFIC LIPID TRANSFER
PROTEIN AKOS9
PI SIMILARITY
DIQULEPID 34 32 PY SIMILARITY
DISULFID 40 42 RY SIMILARITY
DIQULEPID 57 92 BY SIMILARITY
DISULFID 66 92 BY SIMILARITY.
SEQUENCE 99 AA 10140 MW: 25045DAWGAAQAKRK64;
Score: 21.6 40.4%; Score 21.6; BE 1; Length 99;
Best local similarity 44 %; Pval No 4.4e-18;
Matches 13; Concentration 17; Mismatches 35; Gaps 1;
QY 1 MRAHMLREAVIAAWNVMSGLAMALGSLSEETPCALICGCFHSYSTVFEE CG
DL 5 NNAWGVNVAWVMAELVVS FNAWNTSTELVSAITDPSISCTAPFY CG
QY 61 KRFQCHHRLPESIFCTAFAFGFVPLVSSSSSSCG 97
DL 63 VEIKENHIEFELKIVNMDCAFFVDMVMTENT 99
RESULT 3
NAME HARVV STIMULANT EST. 102 AA
C1 REC147
OT 01-FEB-1991 (rel. 17, Created)
DT 01-FEB-1991 (rel. 17, last seq. - update)
CC 01-NOV-1991 (rel. 40, last annotation update)
DE Probable nonspecific lipid transfer protein precursor (LTP) (Alen-ton-
DB Specific 10 kDa protein) (B-PABP).
GN LTP2 of Hair of LTP
CN Hordeum vulgare (Barley)
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; Fabales; Poaceae; Poaceae;

```

RESULT 4
NUTP_BETWU
ID NUTP_BETWU STANDARD RTT 117 AA
AC 043748;
DT 01-NOV-1997 (Rel. 15, Created)
DT 01-NOV-1997 (Rel. 15, Last sequence update)
DT 15-DEC-1998 (Rel. 17, Last annotation update)
DE Nucleoside 117-118 transfer protein precursor (NTP)
GN TW17 OR TWPA.
OS Beta vulgaris (Sugar beet)
OC Eukaryota; Viridiplantae; Caryophyta; Eudicotyledons; Trochodactyls
OC Spermatophyta; Magnoliopsida; order Rosales; Fabales
OC Caryophyllales; Caryophyllaceae; Chenop. suborder, Beta
OC NCBI_TaxID=3555;
OX 117; TaxID=3555;
RN 117;
RP SEQUENCE FROM N.A.
RC STRAIN: M14343; Tissue: Leaf;
RX WETTERBERG, M. 1997, P. 117-118.
RA Nelson, K. V., Nelson, J. E., Waddell, M., Nelson, J. T., et al.
RT New antifungal proteins from sugar beet (Beta vulgaris L.) showing
RT homology to the 117-118 transfer protein.
RL Plant Mol. Biol. 41:405-410 (1994).
CC This Swiss-Prot entry is a protein. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL, Heidelberg.
CC The European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit scientific institutions. It is provided as a service to
CC modified and this statement is not removed through any and for commercial
CC entities requires a license agreement. See <http://www.ebi.ac.uk/infocentre>
CC or send an email to license@ebi.ac.uk.
CC
CC EMBL: X22748; J04634; J04635;
CC HSSP: P23096; IRLZ.
DR Eukaryota; Viridiplantae; Eudicotyledons; Caryophyllales; Caryophyllaceae; Chenop. suborder; Beta vulgaris (L.)
DR InterPro: IPR000528; Plant_LTP
DR InterPro: IPR000528; Plant_LTP
DR Pfam: PF00034; Type: alpha-amylase
DR Pfam: PF00034; Type: alpha-amylase
DR SMART: SM00493; AML1.1
DR PROSITE: PS00034; AML1.1
KW Plant defense; Pungent; Lipid binding; Transport; Signal.
FT SIGNAL 1 26
FT CHAIN 1 117
FT DISULFID 28 52
FT DISULFID 38 52
FT DISULFID 53 98
FT DISULFID 73 112
FT DISULFID 73 112
SQ
Query Match 116 AA, 1166 MW, 59602 FCDGAPDSD CP074;
Best Local Similarity 21.6%; Score 107; DB 1; Length 116;
Matches 31, Conservative 15, Mismatches 15, Gaps 4.

P23096; P93434;
DT 01-NOV-1997 (Rel. 15, Created)
DT 01-NOV-1997 (Rel. 15, Last sequence update)
DT 15-DEC-1998 (Rel. 17, Last annotation update)
DE Nucleoside 117-118 transfer protein precursor (NTP)
GN TW17 OR TWPA.
OS Beta vulgaris (Sugar beet)
OC Eukaryota; Viridiplantae; Caryophyta; Eudicotyledons; Trochodactyls
OC Spermatophyta; Magnoliopsida; order Rosales; Fabales
OC Caryophyllales; Caryophyllaceae; Chenop. suborder, Beta
OC NCBI_TaxID=3555;
OX 117; TaxID=3555;
RN 117;
RP SEQUENCE FROM N.A.
RC STRAIN: M14343; Tissue: Leaf;
RX WETTERBERG, M. 1997, P. 117-118.
RA Nelson, K. V., Nelson, J. E., Waddell, M., Nelson, J. T., et al.
RT New antifungal proteins from sugar beet (Beta vulgaris L.) showing
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CC or send an email to license@ebi.ac.uk.
CC
CC EMBL: X22748; J04634; J04635;
CC HSSP: P23096; IRLZ.
DR Eukaryota; Viridiplantae; Eudicotyledons; Caryophyllales; Caryophyllaceae; Chenop. suborder; Beta vulgaris (L.)
DR InterPro: IPR000528; Plant_LTP
DR InterPro: IPR000528; Plant_LTP
DR Pfam: PF00034; Type: alpha-amylase
DR Pfam: PF00034; Type: alpha-amylase
DR SMART: SM00493; AML1.1
DR PROSITE: PS00034; AML1.1
KW Plant defense; Pungent; Lipid binding; Transport; Signal.
FT SIGNAL 1 26
FT CHAIN 1 117
FT DISULFID 28 52
FT DISULFID 38 52
FT DISULFID 53 98
FT DISULFID 73 112
FT DISULFID 73 112
SQ
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Best Local Similarity 21.6%; Score 107; DB 1; Length 116;
Matches 31, Conservative 15, Mismatches 15, Gaps 4.

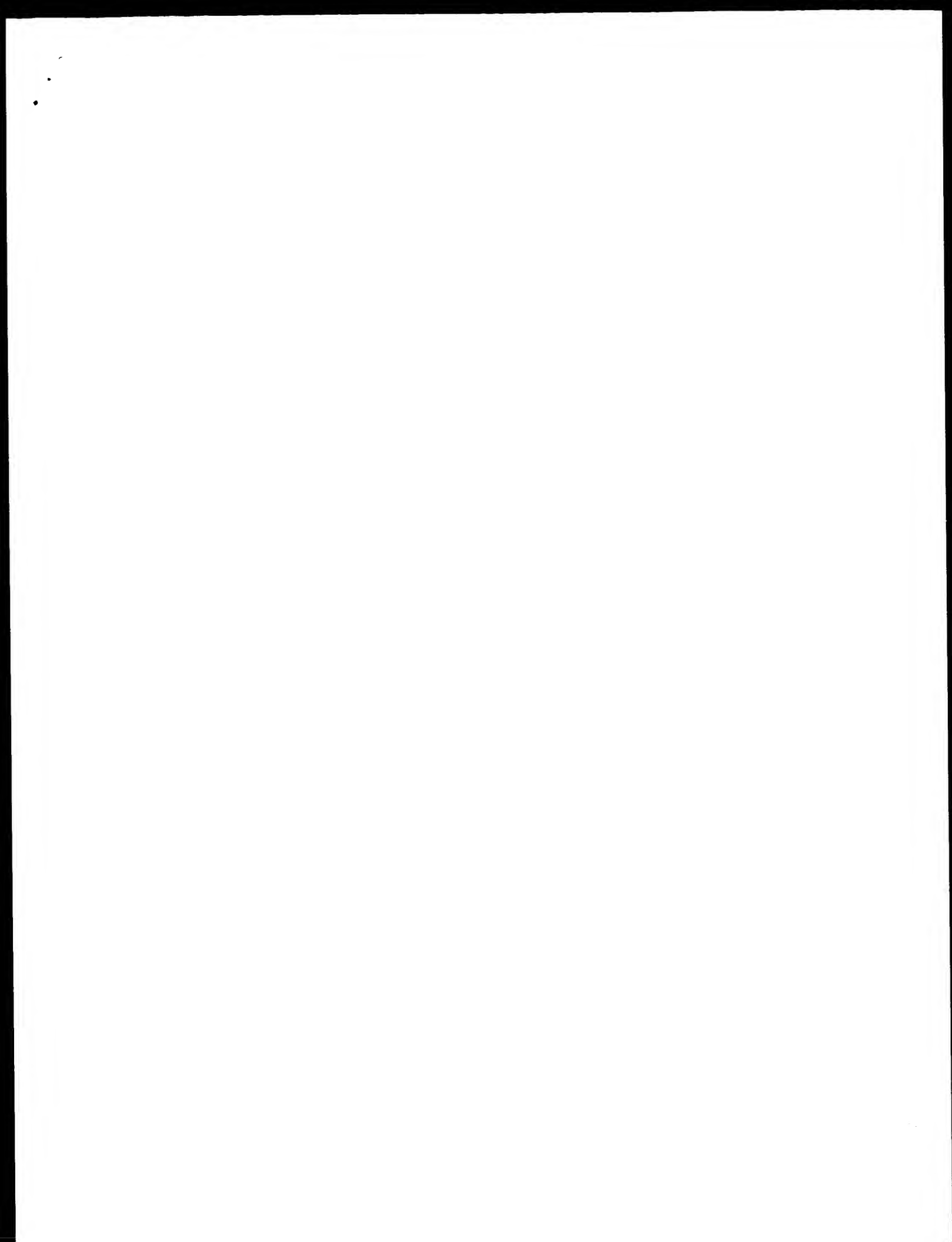
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Mon Jan 13 09:25:02 2003

us-09-923-844b-4.rsp

Page 9

Search completed: January 12, 2003, 07:03:20
Job time : 26 secs




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PL NATURE 409-816-820(2000)
EMBL: AAG6074.1; -
InterPro: IPR003612; AA1
DR InterPro: IPR001768; Try/amyl inhbt.
PIam: PRC0234; try_alpha_amyl; 1.
SMART: SMO0499; AMY1_1.
SEQUENCE 102 AA; 1051 MW; 55-A443d;655-64E JF0564;

Query Match      34.4%   Score 124.5, DB 10, Length 102
Best Local Similarity    33.3%; Pred.No.1.6e-15;
Matches 36; Conservative 19; Mismatches 36; Indels 17; Gaps 27

QY       1 MKRPIMQLGLVAVIAAMVMELAA-----TAVICHLWELVECAASGSL 47
DB        VLVVFVLSTSPALAKEDTSNVSVTLPAPLPAALAAITGGHG 54

QY     40 PSISDSKVPKEPPTDYLKPNSIFGVSPAAGAIIACGSIVSGP 97
DB          ||||| || | | | | | | | | | | | | | | | |
LE     50 ASLAGLAFLTELSSLSGFARPPAPAATVTFSEAFPVILA TVAVET 100

RESULT 9
Q9FF39 PRELIMINARY; PRT; 103 AA.
ID Q9FF39 AC Q9FF39;
DT 01-MAR-2001 (TrEMBLrel. 16, Created)
RE 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DE 01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
GE Genomic DNA, chromosome 5, Pl clone-MXA31.
OS Arabidopsis thaliana (Mouse-ear cress).
PE Fungal, eukaryotic, Erythrocyte, Embryo-thyta, Tracheophyta, Spermatophyta, Magnoliopsida, euembryophytes, Angiosperms, Rosales, Brassicales, Brassicaceae, Arabidoideae, Arabis, NCBI-TaxId=3702, [1]
FN SEQUENCE FROM N.A.
FE STRAIN=COLUMBIA;
RX MEDLINE#97471969; PubMed=5303910;
RA Suetsugu Y., Kikuchi H., Nakamura Y., Kaneko T., Asanuma E., Fukami M., Miyajima N., Tabata S.;
SA "Structural analysis of Arabidopsis thaliana chromosomes 5. Sequence features of the 1.6 Mb regions covered by twenty physically assigned clones."
RT PL clones";
RL PNA Res 4 215-730(1997);
DR EMML, AB055447; BABI284.1; -
InterPro: IPR003612; AA1.
DR InterPro: IPR001768; Try/amyl inhbt.
DP Pfam, PRC0234; try_alpha_amyl; 1.
LK SMART, SMO0499; AMY1_1.
SQ SWISSPROT 103 AA; 1051k MW; 41S-CFAEGDAADLR GR064.

Query Match      36.4%   Score 126.5; DB 10; Length 103;
Best Local Similarity    37.0%; Pred No. 3.8e-15;
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QY       5 IMILFLVAVIAMMVRMS---ELLANR VLCTHMLAFCMAASSLFIDSDTHSR 57
DB          ||||| || | | | | | | | | | | | | | | | |
LE     4 TAMVPLVVSVWSVAESIKATEVELSDSATVSAVCASAAPPKLIVLTIEVG 64

QY     58 WAEFPFGDGLPKLP.P.FVSPAAPAFASAWTVSIKD 97
DB          ||||| || | | | | | | | | | | | | | | | |
LE     64 SPEEPFTHTIPPSITVDSPARFIATIVVIHD 103

RESULT 10
O64431 PRELIMINARY; FFT; 96 AA
ID O64431 AC O64431;
DT 01-AUG-1998 (TrEMBLrel. 07, Created)
DE 01-AUG-1998 (TrEMBLrel. 07, Last sequence update)
DE 01-JUN-2002 (TrEMBLrel. 22, Last annotation update)
DE Lipid transfer protein (Fragment).
GN PEC-1.
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